BEFORE
THE PUBLIC SERVICE COMMISSION
OF SOUTH CAROLINA
DOCKET NO. 2019-185-E

IN RE: South Carolina Energy Freedom Act (H.3659) Proceeding to Establish Duke Energy Carolinas, LLC's Standard Offer, Avoided Cost Methodologies, Form Contract Power Purchase Agreements, Commitment to Sell Forms, and Any Other Terms or Conditions Necessary (Includes Small Power Producers as Defined in 16 United States Code 796, as Amended) - S.C. Code Ann. Section 58-41-20(A)	)	**SURREBUTTAL TESTIMONY OF HAMILTON DAVIS ON BEHALF OF SOUTH CAROLINA SOLAR BUSINESS ALLIANCE**

I. INTRODUCTION AND PURPOSE

Q. Please state your name and business address.

A. My name is Hamilton Davis, and my business address is 1519 King Street Extension, Charleston, SC 29405.

Q. Have you previously filed direct testimony in this proceeding before the South Carolina Public Service Commission?

A. Yes.

Q. What is the purpose of your surrebuttal testimony?

A. The purpose of my surrebuttal testimony is to respond to claims made by Witness Snider and Witness Brown in their rebuttal testimonies, which pertain to my direct testimony in this proceeding.

Q. Please briefly summarize your surrebuttal testimony.

A. My surrebuttal testimony begins with a response to multiple problematic claims made by Witness Snider, whereby he fails to appreciate the historical and future capacity contributions from solar, fails to acknowledge the role of solar + storage in meeting the Company's capacity needs and the requirements of Act 62, and misrepresents the financial incentives influencing the Company's policy and regulatory positions. I then respond to Witness Brown on a range of issues related to the status of PURPA, the legislative intent and impacts of PURPA and Act 62 on competition and utility customers, and the risks faced by customers as a consequence of utility-owned generation. I also address Witness Brown's misunderstanding of competition within monopsony markets like South Carolina and illustrate his contradictions and inconsistencies related to the Company's North Carolina CPRE program.

II. RESPONSE TO WITNESS SNIDER

Q. Do you agree with Witness Snider that solar does little to avoid capacity needs and therefore QFs have little impact on the need for future generation?

A. No. Witness Snider assumes that solar provides no capacity value to Duke's systems. This ignores the fact that the Company's avoided capacity calculations for Duke Energy Carolinas and Duke Energy Progress are disputed by SBA Witness Burgess in this proceeding and that the capacity contribution from solar is an issue that will be resolved by this Commission. Notably, ORS Witness Horii's testimony recommends significant changes to the avoided capacity calculation produced by Duke Energy Carolinas, which results in substantial additional capacity value being credited to QF solar. The rationale underpinning avoided capacity payments is in large part to provide QFs with payments for utility capacity needs that are either delayed or would otherwise be borne by ratepayers for utility-built generation. Even under the company's proposed rates, DEC does assign some capacity value to new solar generation. Witness Snider also glosses over the fact that Duke ascribes significant capacity value to existing and planned solar generators in its Integrated Resource Plans.

Witness Snider also ignores the role of storage and its ability to provide capacity when it is needed by the Company. QF storage resources are an integral part of Act 62 and this proceeding, yet the value and flexibility of storage resources are not addressed by Witness Snider or Witness Brown in his rebuttal testimony. Notably, two of the recent projects awarded in Duke's CPRE solicitation were solar + storage projects.

Q. Do you agree with Witness Snider that because QF purchases are a pass through for the Company that Duke has no incentive to artificially drive down the avoided costs available to QFs?

A. No. As noted above, the capacity contribution from solar can both delay and offset utility investments in new generation, thus depriving the Company of opportunities to earn a return for its shareholders.

Likewise, the Company has a vested interest in the fuel-type used to meet energy demand on its system. In its 2019 IRP, Duke assumes upwards of 12 GWs of natural gas capacity will be added in the next 15 years. Along with that new natural gas capacity comes a need for additional gas infrastructure at the distribution and transmission level, which Duke or a Duke affiliate will build and own, generating significant revenues for Duke Energy shareholders.

Therefore, a significant and obvious incentive exists for Duke to bias natural gas as a fuel preference over solar and solar + storage resources.

Finally, when more of Duke's system energy needs are met with QF solar, fewer megawatt hours must be met by the Company's generating units, which delays or avoids the need for future investments in baseload- and intermediate-type power plants in favor of lower-cost peaking plants. Since baseload and intermediate plants have a larger upfront capital cost than peakers and are thus a larger addition to rate base, QF energy has a profit-eroding effect on Duke despite the fact that QF purchases are a pass through for the Company.

Q. Do you agree with Witness Snider's claim that Duke's CPRE program is evidence that the Company is not biased against QF solar?

A. No, for several reasons. First, CPRE is not a program Duke initiated voluntarily, but is instead a program mandated by the North Carolina General Assembly under N.C. HB 589. A practical effect of N.C. HB 589 has been to virtually eliminate PURPA offtake opportunities historically provided to QFs in favor of a competitive procurement model over which Duke has additional control and which provides direct financial benefits to the Company. Duke and its de-regulated affiliates have the ability to compete for 30% of the capacity procured through CPRE, as well as purchase unlimited additional projects through asset acquisitions negotiated with other winning bidders. And in fact, Duke was awarded almost 45 percent of the total capacity awarded – a fact Duke touted of in a press release.[1] Furthermore, North Carolina allows Duke to rate base the network upgrades needed to interconnect winning projects. In short, there is a clear financial incentive for Duke to prefer CPRE over QF solar developing according to PURPA and Act 62 requirements. Ironically, Duke Energy Florida has elected to self-build solar facilities rather than procure solar through competitive solicitations or PURPA.[2] By self-building these solar projects in Florida and recovering its cost through a traditional cost-of-service rate mechanism, Duke's customers will end up paying significantly more than if Duke had used a CPRE-style procurement mechanism.

Witness Snider and Witness Brown also repeatedly advertise the advantages of Duke's CPRE program from both a cost and flexibility perspective. As will be discussed in more detail later in my surrebuttal testimony, the winning bids awarded for CPRE

[1] Competitive process yields Carolinas' biggest one-day collection of solar projects ever, Duke Energy (April 17, 2019): https://news.duke-energy.com/releases/competitive-process-yields-carolinas-biggest-one-day-collection-of-solar-projects-ever-significant-savings-for-duke-energy-customers

[2] Duke Energy Florida, LLC's Petition for a Limited Proceeding to Approve First Solar Base Rate Adjustment, FPSC Docket No. 2018-149-E (July 31, 2018): http://www.psc.state.fl.us/library/filings/2018/04991-2018/04991-2018.pdf

projects in 2019 are for 20-year fixed rate contracts that are *higher* than the avoided cost rates proposed by Duke in this proceeding. Although Witness Snider and Brown repeatedly cite the benefits of the dispatchable PPAs used for CPRE, Duke did not propose a dispatchable PPA in this proceeding, nor did they propose a 20-year contract tenor that would result in additional capacity value for QF contracts.

Q. Do you agree with Witness Snider that the SBA has a direct and substantial interest in avoided cost rates being set "as high as possible'?

A. No. As I readily acknowledge in my direct testimony, SBA's members clearly have a financial interest in the outcome of this avoided cost proceeding, and I explicitly recommend that this Commission consider the profit bias of QFs when considering SBA's testimony and analyses (Davis Direct at 16). I also directly address the reasons why having avoided cost set "as high as possible" is not in the interest of the SBA, as this would result in a flooding of the South Carolina solar market with developers that could not otherwise compete at lower, <u>accurate</u> avoided cost rates for the limited land conducive to solar development and the finite capacity that solar can effectively displace on the Company's system (Davis Direct at 15). A flood of additional projects would also result in further delays in Duke and Dominion's interconnection queues, which are already heavily backlogged to the detriment of SBA's members.

III. RESPONSE TO WITNESS BROWN

Q. Do you agree with Witness Brown's characterization of your PURPA testimony, specifically that you have not addressed the ongoing "discussion" about PURPA before FERC?

A. No. As an initial matter, the FERC Notice of Proposed Rulemaking ("NOPR") had not been issued prior to the filing of my direct testimony. However, the NOPR was issued prior to filing my direct testimony in the Dominion avoided cost proceeding (2019-184-E), and I address it in my testimony in that docket. As I am sure Witness Brown can appreciate, there are many "discussions" underway at FERC, the U.S. Congress, the South Carolina General Assembly, and elsewhere that could materially impact the future of energy regulation in South Carolina. The fact that neither I nor Witness Brown address those "discussions" in testimony is irrelevant, as is the FERC NOPR in this proceeding.

PURPA is a federal statute and is not being amended by FERC. FERC has requested public comment on proposed changes to some of the regulations implementing PURPA, but those rules are only proposed and have no legal significance whatsoever. Contrary to Witness Brown's characterization, in the absence of a final rule, the NOPR does not even constitute "guidance" from FERC. The NOPR has just been published in the *Federal Register*, and a final rule, if one is issued, may bear little or no resemblance to the NOPR.[3] In no event will a final rule be issued by the time this Commission issues a ruling in this docket.

[3] It bears noting that in 1988, FERC similarly issued a series of NOPRs, totaling hundreds of pages, proposing to address issues similar to those raised in the current NOPR. *See Notice of Proposed Rulemaking, Administrative Determination of Avoided Costs, Sales to Power Qualifying Facilities, and Interconnection Facilities*, 53 Fed. Reg. 9331 (1988); *Notice of Proposed Rulemaking, Regulating Government Bidding Programs*, 53 Fed. Reg. 9324 (1988); *Notice of Proposed Rulemaking, Regulations Governing Independent Power Producers*, 53 Fed. Reg. 9327 (1988). Like the current NOPR, the 1988 proposals were strongly supported by investor-owned utilities. However, there were significant questions about the legality of the proposals (as there are about the current NOPR) and the proposed rules were never finalized. Ten years later, FERC issued orders formally terminating the rulemaking proceedings. 63 Fed. Reg. 51310 (Sept. 25, 1998); see also John Wyeth Griggs, *Competitive Bidding And Independent Power Producers: Is Deregulation Coming To The Electric Utility Industry*, 9 Energy Law Journal 415 (1988).

Act 62 requires this Commission to comply with "PURPA and the Federal Energy Regulatory Commission's implementing regulations and orders." S.C. Code Ann. § 58-41-20. It does not require this Commission to heed proposed rules. If and when FERC does amend its PURPA regulations, that guidance should be considered by this Commission in subsequent proceedings conducted pursuant to Act 62. In any event, the proposals put forth by SCSBA in this proceeding are not inconsistent with FERC's proposed rule changes.

Q. Are you familiar with the arguments put forth by Witness Brown in his rebuttal testimony as to why the current FERC requirements related to PURPA implementation are problematic?

A. Yes. These same arguments were made by Duke when testifying against certain provisions of Act 62 during hearings held by the South Carolina General Assembly, which were ultimately unpersuasive in preventing long-term fixed price contract requirements from being adopted into statute. I am also familiar with the extensive efforts to amend PURPA and its implementing regulations in both Congress and at FERC by the investor-owned utility association, the Edison Electric Institute (EEI), of which Duke is a member and where Duke CEO Lynn Good recently served as Chairman of the Board. My company, Southern Current, will continue to be engaged on a variety of fronts in the current FERC proceedings around PURPA. However, as noted above, no regulatory changes to PURPA have been enacted by FERC and any future changes that affect implementation of Act 62 should be taken up by this Commission at the appropriate time.

Q. Do you agree with Witness Brown's characterization of your testimony as advocating for adoption of avoided cost rates that exceed the future costs that would be avoided "but for" the Company's purchase from QFs?

A. No. As clearly stated in my direct testimony, SBA contends that avoided cost rates should be just and reasonable and should, to the extent possible, accurately reflect the costs being avoided by the utility. I also testify that Act 62 requires avoided cost rates be just and reasonable to ratepayers, addressed in a fair and balanced manner, and intended to reduce the risk placed on the using and consuming public. My testimony also points out that, just as when setting general utility rates, this Commission has discretion in establishing just and reasonable avoided cost rates based on the analysis and testimony of all parties to this proceeding.

Q. Do you agree with Witness Brown that neither PURPA nor Act 62 enables competition between QF resources and utility-owned resources?

A. No. In making this erroneous claim, Witness Brown ignores the legislative intent and practical outcomes of both PURPA and Act 62. As noted in my direct testimony, Congress intended PURPA to shift a portion of electric generation away from resources built, owned, and rate-based by vertically integrated monopoly electric utilities that often resulted in cost overruns paid by ratepayers.[4] FERC Commissioner Glick reinforced this sentiment in his

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[4] See, e.g., *FERC v. Mississippi*, 456 U.S. 742, 756 (1982) (recounting PURPA's statutory directives); H.R. Rep. No. 95-1750 at 9 (1978) (Conf. Rep.) (documenting the legislative history and development of PURPA). See also, Richard Munson, From Edison to Enron: The Business of Power and What it Means for the Future of Electricity, 103-107 (2005) (recounting that Senator John Durkin was a proponent of competition in the electric industry and supported by manufacturers that were interested in installing their own generation as a means to "avoid the high costs of utilities' over-budget reactors").

recent partial dissent regarding the NOPR, stating, "I believe that the goals of PURPA – including the need to expand competition and reduce reliance on fossil fuels[5] – remain as relevant now as ever."[6]

Likewise, and as Witness Brown is surely aware, enabling increased competition from small power producers was a constant theme of the public legislative discussions surrounding Act 62. To suggest the sponsors of the House and Senate legislation that resulted in Act 62, such as Senator Tom Davis and Representative Peter McCoy–both avid advocates of free market principles–did not intend to inject additional competition into South Carolina's vertically integrated electricity market is absurd. In fact, after Act 62 was signed into law by Governor McMaster, Senator Davis penned an opinion editorial in his local newspaper, Bluffton Today, entitled "Davis: Law opens energy markets to more competition." Senator Davis states in that editorial that "The objective here is for consumers to pay rates that are a function of what competition in the energy-production market dictates, as opposed to simply paying a mega-utility a guaranteed rate of return on its invested capital."[7]

Q. Are there other areas where Act 62 promotes competition?

A. Yes. In addition to statutory requirements related to avoided cost, contract terms and conditions and PURPA implementation, the Act requires utilities to file Voluntary

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[5] *See Am. Paper Inst., Inc. v. Am. Elec. Power Serv. Corp.*, 461 U.S. 402, 405 (1983) (describing Congress's intent in enacting PURPA).

[6] Dissent in Part of Commissioner Richard Glick Regarding FERC's Notice of Proposed Rulemaking to Update PURPA Regulations, FERC Docket Nos. RM19-15-000, AD16-16-000 (September 19, 2019) : https://www.ferc.gov/media/statements-speeches/glick/2019/09-19-19-glick-E-1.asp#.XZ0lVZNKgWo

[7] Davis, Tom, Law opens energy markets to more competition, Bluffton Today (June 2, 2019): https://www.blufftontoday.com/news/20190602/davis-law-opens-energy-markets-to-more-competition

Renewable Energy Programs that enable utility customers to negotiate directly with SPPs for the purchase of energy and capacity. S.C. Code Ann. § 58-41-30. This engenders competition between utilities and SPPs for meeting the clean energy demand of customers. The Act also authorizes the Commission to open a generic docket for purposes of establishing a competitive solicitation program for renewable energy procurement. S.C. Code Ann. § 58-41-20 (E)(2)). Assuming such a program looks similar to Duke's CPRE program in North Carolina, then SPPs and Duke would be bidding against one another to be awarded contracts. Finally, S.C. Code Ann. Section 58-33-110(8) provides this Commission with increased authority related to evaluating utility proposals for new major facility for utility generation, which includes requirements that alternative generation options have been fully vetted and considered before construction of the proposed facility can commence.

Q. Witness Brown claims that Duke's CPRE represents a number of advantages over QF solar purchases, including the purchase of solar energy and capacity at below avoided cost rates. Has Witness Brown accurately described the benefits of CPRE as compared to QF solar?

A. No. Although Southern Current is generally supportive of the CPRE competitive solicitation construct and was successful in having a project selected during the bidding process for CPRE Tranche 1, Witness Brown overstates the benefits of CPRE as compared to QF solar. For example, Witness Brown embraces the supposed benefits of variable rate contracts for energy when it comes to PURPA reform while warning this Commission against adopting fixed price QF contracts with durations of longer than ten (10) years (Brown Rebuttal at 8 and 9). However, CPRE contracts include energy rates that are fixed for twenty (20) years – a fact that Duke promotes as being beneficial to customers, who would enjoy "20 years of cost-effective energy" as a result of the program.[8] As mentioned previously, the avoided cost rates filed by Duke in this proceeding are significantly *lower* than the average contract price awarded just a few months ago in Tranche 1 of CPRE. It should also be noted that under the rules of the program, CPRE Tranche 1 projects may come online as late as July 2021, which may be later than many of the projects that would seek PPAs under avoided costs established in this proceeding.

Q. Do you agree with Witness Brown that SPPs are not competing against utility-owned generation?

A. No. Witness Brown's testimony is utterly confused on this point. Because of the utility's monopsony status, there is not a "market" for wholesale energy in the traditional sense of the word. Nonetheless, there are price signals (equal to the utility's administratively-determined avoided cost) being sent to SPPs with regard to energy and capacity, which (if prices are set properly) incentivize them to make efficient investments in new generation. However, if the utility can reduce its costs for self-built generation and the production of energy, then avoided costs go down and the SPP is forced to compete for market share at those lower costs, to the benefit of ratepayers. For Witness Brown to claim that an SPP is not competing against Duke based on the Company's cost of energy and capacity is to completely misunderstand the PURPA construct.

[8] Competitive process yields Carolinas' biggest one-day collection of solar projects ever, Duke Energy (April 17, 2019): https://news.duke-energy.com/releases/competitive-process-yields-carolinas-biggest-one-day-collection-of-solar-projects-ever-significant-savings-for-duke-energy-customers

Q. Witness Brown repeatedly claims that PURPA and Act 62 requirements will not result in the "lowest possible cost" of energy and capacity being delivered to customers. Do you agree?

A. I believe Witness Brown is using this claim in a misleading way. If Duke's generation portfolio actually reflected a least cost portfolio for customers, then administratively set avoided cost would reflect that. For example, if South Carolina was a restructured wholesale market like ERCOT and not a vertically integrated utility market, then utility customers would get the benefit of real-time, least cost resources at prices determined on the open market. But we are not in a true competitive market and Duke is incentivized to operate not a least cost system, but the highest cost system it can be confident will pass regulatory scrutiny.

SBA and its members have been vocal advocates for increased competition in all types of energy markets and do not simply rely on PURPA for business development opportunities. In fact, during legislative negotiations around Act 62, the SBA proposed a requirement whereby all new utility capacity needs identified within an updated integrated resource planning framework would be met through independently administered competitive solicitations. This would have effectively relieved the utilities of their must-purchase obligations for avoided capacity under PURPA. Duke was not receptive to this proposal and ultimately supported a more PURPA-centric version of Act 62. Southern Current and many other members of SBA are members of the Solar Energy Industries Association (SEIA), which recently filed comments at FERC also recommending that IRP driven all-source competitive solicitations be embraced as a means of obviating the avoided capacity must-take obligations under PURPA.

The solar industry has embraced competition wherever it has been allowed to compete. In the absence of other market mechanisms in South Carolina, SBA is reliant on proper implementation of Act 62 and accurate avoided cost rates to ensure competition is possible.

Q. Has Witness Brown effectively rebutted your direct testimony related to the risk of overpayment to SPPs if energy prices drop below the avoided energy rate being paid to an SPP?

A. No. I maintain the same position articulated in my direct testimony. I acknowledge the risk of "overpayment" in situations where energy prices drop below the forecasted avoided energy rate—a risk that is equal to but opposite the risk posed when the utility does *not* procure energy via long-term contracts. However, Mr. Brown continues to ignore the fact that any "over-payment risk" must be considered in the full context of the broader risks associated with utility-owned generation. There are no risk-free options that completely protect customers, but SPPs nonetheless provide a significant risk hedge against a bevy of risks currently borne by utility customers that flow from utility-owned generation, such as coal ash management and clean-up costs, plant delays, cost-overruns and abandonments, fuel prices that exceed projections, and future environmental regulations. The General Assembly heard these same arguments from Duke during public hearings on Act 62 and were unpersuaded by them, as evidenced by the Act's heavy reliance on PURPA and the requirement that utilities make 10-year fixed prices contracts available to SPPs.

Q. Do you agree with Witness Brown that a comparison of risk profiles between SPP-owned generation and utility-owned generation is "entirely inapplicable to this proceeding"?

A. No. Act 62 explicitly requires that this Commission "shall strive to reduce the risk placed on the using and consuming public." SC Code Ann. § 58-41-20(A). The statute does not limit the scope of risks that the Commission can consider. It does, however, require the Commission to consider QF resources on a fair and equal footing with utility-owned resources. SC Code Ann. § 58-41-20(B). This cannot be reconciled with Witness Brown's claim that any consideration of the risk associated with utility-owned generation, which can be mitigated by SPPs, is inapplicable to this proceeding.

Q. Do you agree with Witness Brown that the risk-mitigation mechanisms built into South Carolina's regulatory structure obviate any need for this Commission to consider risk from utility owned resources in this proceeding?

A. No. As a general matter the Commission will disallow recovery of utility investments only when they are made imprudently. However, even where costs are prudently incurred, the risks of cost overruns, project delays, and unforeseen environmental costs (to name a few) are still present. The recent history of utility abandonment of nuclear plants, mounting costs associated with coal ash, potential near-term environmental regulations on carbon and fracking, and the historical volatility of natural gas prices all make risk associated with utility-owned generation pertinent to these proceedings. The additional fact that Duke advocated for this Commission to permit its shareholders to profit from the abandoned Lee Nuclear Facility, in the form of a $9 million annual return on its "investment" in the failed project for 12 years, to be paid by its customers, indicates exactly where the Company's priorities lie when it comes down to shareholders and ratepayers.[9] That it believed

[9] Duke Energy wants $225 million more per year from SC utility customers, The Post & Courier (March 20, 2019): https://www.postandcourier.com/business/duke-energy-wants-million-more-per-year-from-sc-utility/article_e066dfa8-4b0e-11e9-b4c7-87a7b1459941.html

Commission denial of these profits to be "punitive and arbitrary" demonstrates exactly the capital bias SBA has focused on in these proceedings.[10]

Q. Does this conclude your rebuttal testimony?

A. It does.

[10] *Id.*